

AIA File No. 19-E-1

MENGEL *Flush* DOORS

THE MENGEL COMPANY
LOUISVILLE 1, KENTUCKY



Mengel Hollow-Core Doors
Interior or Exterior



Mengel Hollow-Core Deluxe Doors
Interior or Exterior



Mengel Stabilized Solid-Core Doors
Exterior and Interior

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A Nationally-Known Line of
BETTER Doors For Every Door
Opening — Palace or Project

EXCLUSIVE DOVE-TAIL WEDGE-LOCK JOINTS
AT ALL FOUR CORNERS—FINEST
CABINET-MAKER'S CONSTRUCTION

RAILS ARE POPLAR
OR EQUAL SPECIES
PRECISION-MACHINED
FOR ACCURACY

STILES ARE POPLAR
OR EQUAL SPECIES
PRECISION-PLANED
TO PERFECT
SMOOTHNESS

CROSS-BANDING IS
MADE OF CAREFULLY
SELECTED HARDWOOD
VENEERS, CHOSEN FOR
COMPATABILITY WITH
FACE VENEER SPECIES

FACES ARE SMOOTHLY
BELT-SANDED, READY
FOR FINISHING

ALL MENGEL DOORS
ARE PREFIT
TO EXACT BOOK SIZES

MENGEL

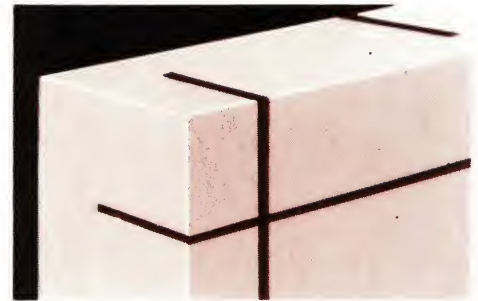


FIGURE 1

SLOTS ABSORB EXPANSION

Wood expands with heat and humidity, but reasonable expansion is absorbed by deep slots cut both with and across the grain. Dry atmosphere shrinks the solid wood between the slots, increasing the width of the slots, without changing the dimensions of the door itself.

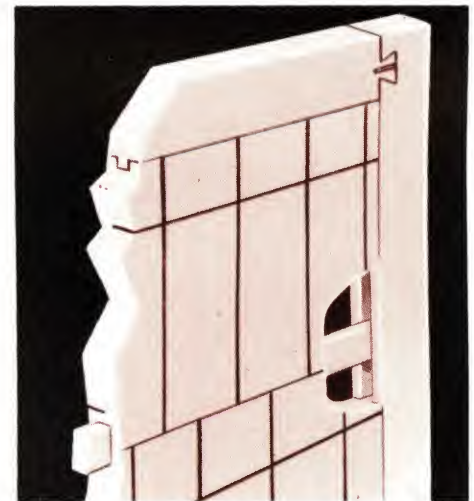


FIGURE 2

TONGUES-AND-GROOVES HOLD CORE INTO FRAME

The entire core assembly is tongued-and-grooved into the frames, with enough tolerance to absorb stresses which might otherwise be transmitted to the frame.



MENGEL — world's
largest manufacturer of hardwood products...

growers and processors of timber, manufacturers of fine veneers, plywood, kitchen cabinets, wall closets, furniture (and corrugated containers). Generations of know-how in the selection and preparation of imported and domestic hardwood veneers and lumber

assure you of high-quality *materials* in your Mengel Flush Doors. Time-tested, exclusive *design*, rigid quality-control, critical inspection, and continuous testing assures you finest workmanship, and trouble-free performance.

Stabilized **SOLID-CORE FLUSH DOORS***..

... for supreme stability and endurance

Mengel Stabilized Solid-Core Flush Doors* are engineered and manufactured to the highest standards of quality. They are recommended for exterior and interior installations wherever solid-core construction is desired.

The lumber used in the core is scientifically processed by horizontal and vertical stabilizing slots to control warpage or movement. These slots absorb expansion and contraction of core members and provide dimensional stability. (See Figure 1.)

Intermediate crossrails are used, tongued-and-grooved into both the upright core blocks and the door frame, to secure the core members while absorbing stresses. (See Figure 2.)

Mengel Stabilized Solid-Core Doors are designed to give satisfactory service even under severe conditions of climate, temperature and usage. Constant tests are

conducted to insure stability, resistance to temperature variations and humidity changes, and to assure uniform high quality. The entire assembly is fabricated with waterproof, positive hot-plate press bonding.

Faces include a variety of domestic and imported hardwoods, including Sliced African Mahogany, Gum, Birch, Oak and Gold Coast Cherry.

STOCK DOORS

Mengel Solid-Core Flush Doors are manufactured in standard stock sizes up to 4/0 x 8/0—with or without standard light openings, or louvers. Special openings, etc., will be quoted on request.

Matching stile edges will be supplied when so ordered.

SIZES AND WEIGHTS...See Back Cover

*Patent Applied For

SPECIFICATIONS

(Meet or exceed the requirements of the U. S. Department of Commerce)

THICKNESS — 1 $\frac{3}{8}$ " and 1 $\frac{3}{4}$ ".

STILES — 2" wide, one-piece Yellow Poplar or equal species. Thickness, 1 $\frac{1}{2}$ " for 1 $\frac{3}{4}$ " doors, 1 $\frac{1}{8}$ " for 1 $\frac{3}{8}$ " doors.

RAILS — Both top and bottom, 3 $\frac{5}{8}$ " wide Poplar or equal species. Thickness, 1 $\frac{1}{2}$ " for 1 $\frac{3}{4}$ " doors, 1 $\frac{1}{8}$ " for 1 $\frac{3}{8}$ " doors.

CORES — Poplar or equal species stabilized by slotting both with and across the grain at regular intervals. (See Figure 1.)

FACES — Face veneers assembled with the grain running vertically, at right angles to the grain of the cross-banding.

ADHESIVE — Waterproof glues are used, hot-plate press bonded.

SANDING — Both faces of all Mengel Doors are smoothly belt-

sanded, providing perfect surfaces for natural, stained or painted finishes.

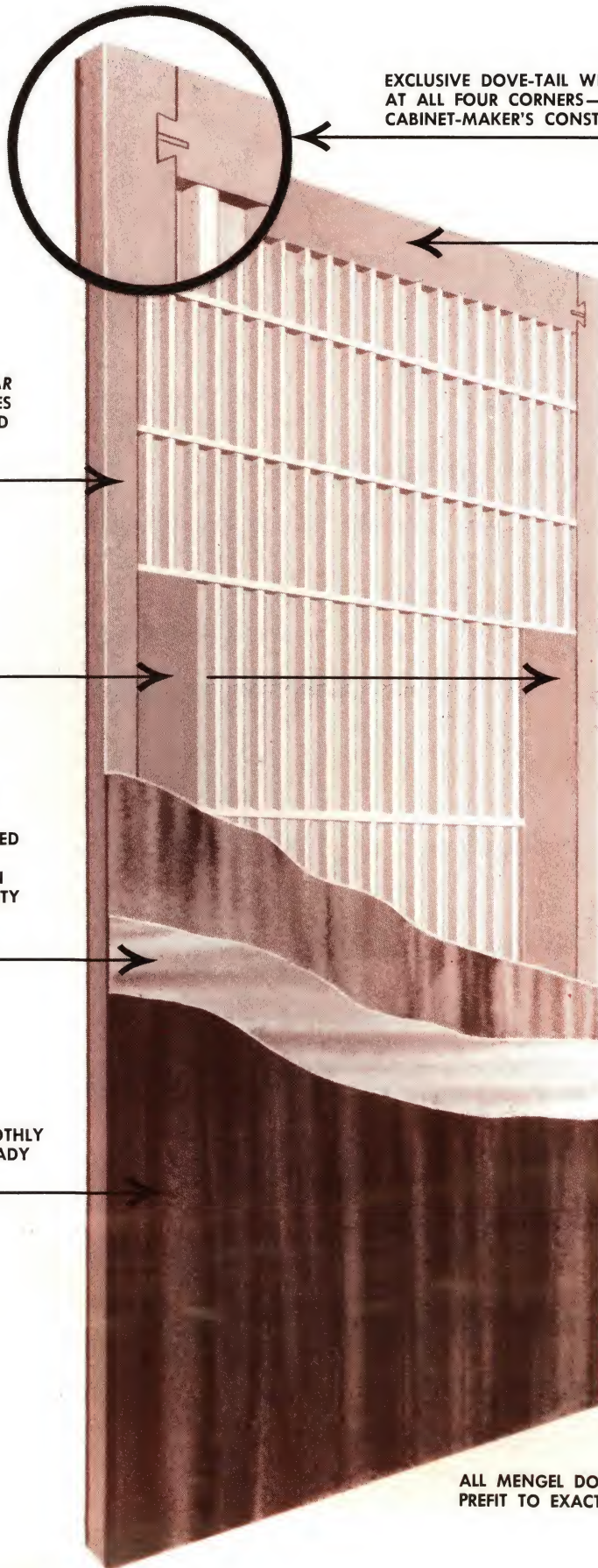
PREFIT — All Mengel Doors are factory prefit to standard book sizes. Stiles are precision-planed for smoothness—no additional planing is necessary.

LIGHT OPENINGS — Light and louver openings may be used in the same door.

PAPER-WRAPPED — Each door individually paper-wrapped in dust-tight package when so ordered.

GUARANTEE — All Mengel Stabilized Solid-Core Doors are *Fully Guaranteed* to equal or exceed the requirements of the National Woodwork Manufacturers Association Warranty. See bottom of page 6.

MENGEL HOLLOW-CORE .



EXCLUSIVE DOVE-TAIL WEDGE-LOCK JOINTS
AT ALL FOUR CORNERS—FINEST
CABINET-MAKER'S CONSTRUCTION

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DOUBLE LOCK
BLOCKS FOR
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CROSS-BANDING
IS MADE OF
CAREFULLY SELECTED
HARDWOOD
VENEERS, CHOSEN
FOR COMPATABILITY
WITH FACE
VENEER SPECIES

FACES ARE SMOOTHLY
BELT-SANDED, READY
FOR FINISHING



The exclusive Mengel Close-Grid Core consists of strips of special insulating fibre board $\frac{3}{8}$ " thick, with vertical strips spaced only 1" apart. This greater area provides exceptional gluing surface, which partially accounts for the unusual strength of Mengel Hollow-Core *Deluxe* Doors. Core material has essential resiliency, cannot cause warping, nor transfer grid pattern to faces.

ALL MENGEL DOORS ARE
PREFIT TO EXACT BOOK SIZES

Deluxe FLUSH DOORS . . .

the finest Grid-core doors that can be built

Mengel Hollow-Core Deluxe Flush Doors are made optionally for interior or exterior use. They embody balanced 7-ply construction to provide controlled reaction to changing weather conditions. They have been proved by many years of manufacture and use, as well as by exhaustive endurance and stability tests. They are light, durable and immune to sagging, warping or buckling under normal conditions. They are designed, engineered and constructed to the highest standards of construction—quality-controlled, throughout manufacture.

DESIGN AND CONSTRUCTION

The design and construction of Mengel Hollow-Core Deluxe Flush Doors are the result of extensive field experience. Continual laboratory research and skilled craftsmanship have made Mengel one of the greatest names in the door industry.

1. **Exclusive Close-Grid Core*** . . . gives much greater area of contact with faces, and allows stronger bond between core and faces.
2. **Hardwood Stiles and Rails*** . . . provide maximum screw-holding power and facilitate color-matching with the faces, in finishing.

3. **Wedge-locked Dovetails*** . . . finest cabinet construction—keeps stiles and rails permanently tight.
4. **Extra Guard against Warpage*** . . . provided by special mill-curing process.
5. **Broad Selection of Hardwood Faces** . . . Sliced African Mahogany, Gum, Birch, Oak and Gold Coast Cherry—individually belt-sanded to satin smoothness . . . permits wide range of finishes . . . reduces finishing costs.
6. **Engineered Construction** . . . assures maximum dimensional stability. There are no better hollow-core doors on the market.

*Mengel exclusive

STOCK DOORS

Mengel Hollow-Core Deluxe Flush Doors are manufactured in standard stock sizes up to 4/0 x 8/0—with or without standard light openings, or louvers. Faces include Sliced African Mahogany, Gum, Birch, Oak and Gold Coast Cherry. Special openings, etc., will be quoted on request.

Matching stile edges will be supplied when so ordered.

SIZES AND WEIGHTS...See Back Cover

SPECIFICATIONS

(Meet or exceed the requirements of the U. S. Department of Commerce)

THICKNESS—1 $\frac{3}{8}$ " and 1 $\frac{3}{4}$ ".

STILES—1 $\frac{1}{8}$ " wide, Yellow Poplar or equal species. Thickness, 1 $\frac{1}{8}$ " for 1 $\frac{3}{8}$ " doors, 1 $\frac{1}{2}$ " for 1 $\frac{3}{4}$ " doors.

RAILS—Both top and bottom, 2 $\frac{3}{4}$ " wide Yellow Poplar or equal species for 1 $\frac{3}{8}$ " doors, and 3 $\frac{1}{2}$ " wide for 1 $\frac{3}{4}$ " doors. Thickness same as for stiles.

LOCK BLOCKS—for 1 $\frac{3}{8}$ " and 1 $\frac{3}{4}$ " thickness doors—3 $\frac{1}{8}$ " wide by 21" long, centered. Inside edge of Lock Block shall not be less than 4 $\frac{1}{4}$ " from outer edge of door.

CORES—Constructed of $\frac{3}{8}$ " thick rigid Insulok insulating fibre board—interlocking assembly arranged like pattern in illustration.

FACES—Face veneers assembled with the grain running vertically at right angles to the grain of the cross-banding. Rotary-cut or sliced—selected and unselected for color. Plain or figured—in domestic or foreign woods.

ADHESIVE—(Interior) Moisture-resistant glues hot-plate press

bonded. (Exterior) Waterproof glues hot-plate press bonded.

SANDING—Both faces of all Mengel Doors smoothly belt-sanded before leaving the factory, providing perfect surfaces for natural, stained or painted finishes.

PREFIT—All Mengel Doors prefit to standard stock sizes. Stiles are precision-planed for smoothness—no additional planing is necessary.

LIGHT OR LOUVER OPENINGS—If light or louver openings are desired on hollow-core doors, special blocking is required and orders must provide specifications. Openings may be provided no closer than within 5 inches of the bottom, top, or sides. If doors are to be cut down in height, equal margins should be sawn from top and bottom, but not to exceed one inch at either end.

PAPER-WRAPPED—Each door individually paper-wrapped in dust-tight package when so ordered.

GUARANTEE—Mengel Deluxe Flush Doors are *Fully Guaranteed* to equal or exceed the requirements of the National Woodwork Manufacturers Association Warranty. See bottom of page 6.



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EQUAL SPECIES PRECISION-
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MENGEL

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DOUBLE LOCK
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Guarantee

All Mengel Flush Doors (Deluxe Hollow-Core, Hollow-Core, and Stabilized Solid-Core) are guaranteed in accordance with the provisions of the Standard Warranty of the National Woodwork Manufacturers Association. Within the limits of this warranty, doors found to be defective in either materials or workmanship will be replaced free of charge not including installation or finishing. As with all high-quality wood doors, it is important that the following precautions be observed:

- (1) Never store (or install) doors in damp or newly-plastered building.
- (2) Never store doors on end or on edge—anywhere.
- (3) Do store doors on level supports, preferably pallets in a dry location.
- (4) Do cover the last door on the top of each pile.
- (5) Do seal (paint or varnish) all faces, stiles, and rails, before hanging.
- (6) Never impair the structural strength of the door by excessive trimming, or by improper cutting for lights, louvers, etc.

HOLLOW—CORE FLUSH DOORS...

Mengel's volume-production door gives you high quality at lowest possible prices

Mengel Hollow-Core Flush Doors (formerly designated as "Standardors") are low-priced, high-quality, hollow-core flush doors built optionally for interior and exterior use. They are offered to meet the need for hollow-core flush doors in those installations which do not demand the many special features embodied in Mengel Hollow-Core *Deluxe* Flush Doors. Their extremely economical price has been achieved by using a slightly different grid pattern and by eliminating the exclusive and costly Mengel wedge-locks at the corners, as used in Mengel Hollow-Core *Deluxe* Doors, and by volume production.

As shown in the cutaway illustration at the left, the Mengel Hollow-Core Flush Door is a 7-ply door, constructed of hardwood or equal species, utilizing the same fibre-board core material as is used in Mengel

Hollow-Core *Deluxe* Doors, but in a ladder construction rather than grid. The core strips are the same thickness as in the Mengel Hollow-Core *Deluxe* Door ($\frac{3}{8}$ "), which provides unusually wide glue-joint area of contact with the faces, resulting in an extremely strong bond between the core and the faces. This helps keep Mengel Hollow-Core Flush Doors flat and stable.

Mengel Hollow-Core Doors are guaranteed precisely the same as Mengel *Deluxe* Hollow-Core Doors.

Mengel Flush Doors are manufactured in standard stock sizes, with faces of Sliced African Mahogany, Gum, Birch and Gold Coast Cherry.

SIZES AND WEIGHTS...See Back Cover

SPECIFICATIONS

(Meet or exceed the requirements of the U. S. Department of Commerce)

THICKNESS— $1\frac{3}{8}$ " and $1\frac{3}{4}$ ".

STILES— $1\frac{1}{8}$ " wide, Yellow Poplar or equal species. Thickness, $1\frac{1}{8}$ " for $1\frac{3}{8}$ " doors, $1\frac{1}{2}$ " for $1\frac{3}{4}$ " doors.

RAILS—Both top and bottom, $2\frac{3}{4}$ " wide Yellow Poplar or equal species. Thickness same as for stiles.

TWO LOCK BLOCKS— $3\frac{1}{8}$ " wide by 21" long, centered. Inside edge of Lock Block shall not be less than $4\frac{1}{4}$ " from outer edge of door.

CORES—Constructed of $\frac{3}{8}$ " thick rigid insulating fibre board, horizontally spaced $2\frac{1}{2}$ " on centers, and supported by vertical section at each end.

FACES—Face veneers assembled with the grain running the long

way at right angles to the grain of the cross-banding. Rotary-cut and sliced. Unselected for color.

ADHESIVE—Moisture-resistant glues, hot-plate press bonded.

SANDING—Both faces of all Mengel Doors smoothly belt-sanded before leaving the factory, providing perfect surfaces for natural, stained or painted finishes.

PREFIT—All Mengel Flush Doors prefit to standard stock sizes. Stiles are precision-planed for smoothness—no additional planing is necessary.

GUARANTEE—Mengel Flush Doors are *Fully Guaranteed* to equal or exceed the requirements of the National Woodwork Manufacturers Association Warranty. See bottom of page 6.

WEIGHT SCHEDULE

DOOR SIZE	MENGEL SOLID CORE		DELUXE MENGEL HOLLOW-CORE		MENGEL HOLLOW-CORE		DOOR SIZE	MENGEL SOLID CORE		DELUXE MENGEL HOLLOW-CORE		MENGEL HOLLOW-CORE	
	Lbs. per door		Lbs. per door		Lbs. per door			Lbs. per door		Lbs. per door		Lbs. per door	
	1 3/8"	1 3/4"	1 3/8"	1 3/4"	1 3/8"	1 3/4"		1 3/8"	1 3/4"	1 3/8"	1 3/4"	1 3/8"	1 3/4"
	Thick	Thick	Thick	Thick	Thick	Thick		Thick	Thick	Thick	Thick	Thick	Thick
1/6 x6/0	32	42	18	22	15	20	2/8 x6/6	61	77	33	41	30	36
1/6 x6/6	34	44	19	23	18	23	2/8 x6/8	62	79	35	43	32	37
1/6 x6/8	35	45	20	25	19	24	2/8 x6/10	64	81	37	45	35	39
1/6 x7/0	37	47	24	30	22	28	2/8 x7/0	66	83	38	47	36	41
1/8 x6/0	35	45	19	23	16	22	2/8 x7/6	71	89	43	53		
1/8 x6/6	38	48	20	24	20	26	2/8 x8/0	76	95	49	61		
1/8 x6/8	39	49	22	28	22	28	2/10x6/0	60	76	28	35	30	35
1/8 x7/0	42	52	26	32	24	30	2/10x6/6	64	82	35	44	34	39
1/10x6/0	38	48	20	24	20	26	2/10x6/8	66	84	36	45	35	39
1/10x6/6	42	53	23	28	22	28	2/10x6/10	68	86	38	47	37	42
1/10x6/8	43	54	24	30	25	31	2/10x7/0	69	88	40	50	38	43
1/10x7/0	45	57	28	35	28	35	2/10x7/6	74	94	45	56		
2/0 x6/0	42	53	21	25	22	29	2/10x8/0	79	100	52	65		
2/0 x6/6	46	58	25	31	25	31	3/0 x6/0	63	80	29	37	32	37
2/0 x6/8	47	59	28	34	26	32	3/0 x6/6	68	87	37	46	35	40
2/0 x6/10	48	61	29	36	28	35	3/0 x6/8	70	89	38	48	35	41
2/0 x7/0	49	62	30	37	29	36	3/0 x6/10	72	91	40	50	38	44
2/2 x6/0	46	58	23	27	23	30	3/0 x7/0	74	93	42	52	39	44
2/2 x6/6	49	63	27	34	27	34	3/0 x7/6	79	100	47	60		
2/2 x6/8	51	64	29	36	28	36	3/0 x8/0	84	107	53	69		
2/2 x6/10	52	66	31	38	30	38	3/4 x6/0	70	89	33	41	35	41
2/2 x7/0	53	68	32	40	31	38	3/4 x6/6	76	96	41	48	39	45
2/4 x6/0	49	62	25	29	24	31	3/4 x6/8	78	99	42	50	40	46
2/4 x6/4	51	65	27	35	26	33	3/4 x6/10	80	101	44	52	41	47
2/4 x6/6	53	68	29	36	27	34	3/4 x7/0	82	104	46	54	43	49
2/4 x6/8	55	69	31	39	28	36	3/4 x7/6	87	111	50	63		
2/4 x6/10	56	71	32	40	30	36	3/4 x8/0	93	119	55	67		
2/4 x7/0	57	72	34	42	31	38	3/6 x6/8	82	104	44	55		
2/6 x6/0	53	68	26	31	25	32	3/6 x7/0	86	109	47	56		
2/6 x6/6	57	72	31	39	27	35	3/6 x7/6	92	117	51	62		
2/6 x6/8	59	74	33	41	30	35	3/6 x8/0	98	124	57	68		
2/6 x6/10	60	76	34	43	32	37	3/8 x7/0	90	113	49	58		
2/6 x7/0	61	78	36	45	33	39	4/0 x6/8	93	119	50	60		
2/6 x7/6	65	82	41	51			4/0 x7/0	98	124	51	62		
2/6 x8/0	69	86	46	59			4/0 x7/6	106	134	57	68		
2/8 x6/0	56	71	27	33	27	33	4/0 x8/0	115	141	63	74		